LOUISIANA DEPARTMENT OF WILDLIFE & FISHERIES

OFFICE OF FISHERIES
INLAND FISHERIES SECTION

PART VI –C (ARCHIVES)

WATERBODY MANAGEMENT PLAN SERIES

BARTHOLOMEW LAKE

AQUATIC VEGETATION TYPE MAPS
AND NARRATIVES

2006 Type Map

Bartholomew Lake Type Map
Summary of Vegetation Survey
Conducted 8/8/06 – M. Wood, R. Lively

STERLINGTON END

Very light vegetation observed in the 5.7 mile stretch from bridge (32^0 41' 11.5" N // -92^0 02' 49.9W) to lower end (32^0 43' 6.4" N // 92^0 03' 21.2W). Small patches of primrose and water hyacinth present with filamentous algae fringe on both sides for last 0.75 mile to end (Figure 1). Vegetation coverage estimated at < 2%.

PERRYVILLE END

Fringe of primrose and water hyacinth and filamentous algae light and limited to North bank at bridge, but becomes gradually heavier and is present on both banks at Barrett's Ramp. From Barrett's Ramp to Public Ramp (32^0 43' 15.3" N // 92^0 02' 15.9W) water hyacinth becomes dominant.

From Barrett's Ramp back towards the bridge, a 3.7 mile fringe of coontail and Hydrilla has developed. A small patch of Hydrilla was observed and removed adjacent to Barrett's Ramp in fall, 2004. Current coverage is apparently one of expansion with patches of Hydrilla mixed with coontail. Vegetation coverage estimated at approximately 5%, primarily consisting of emergent species. Total vegetation coverage estimated at < 5% surface area of the waterbody.

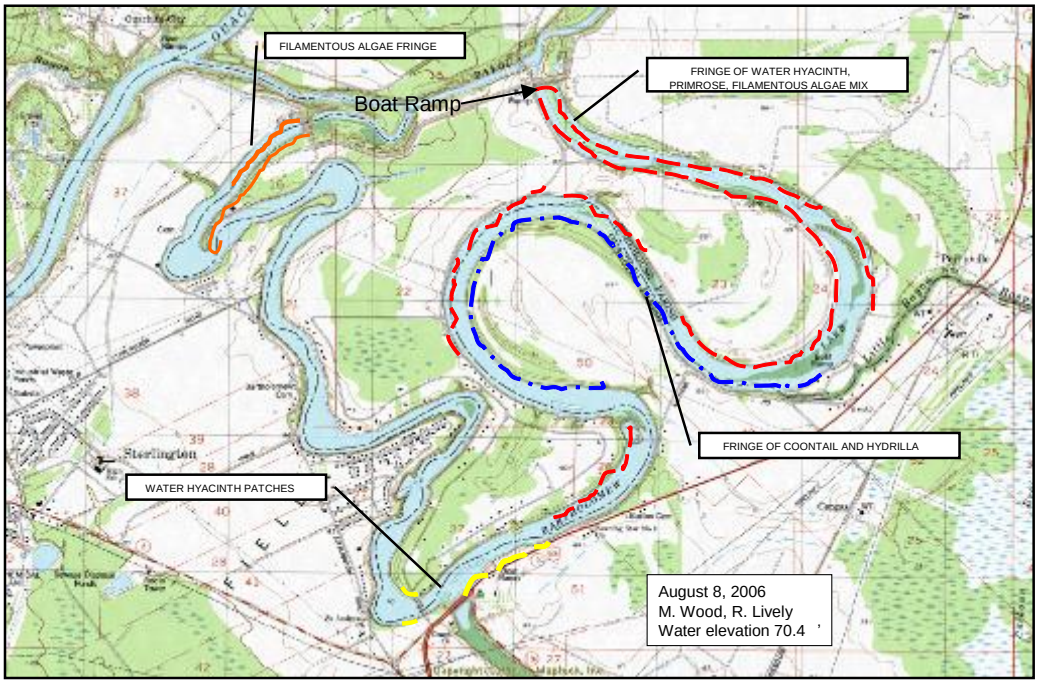

Figure 1. Lake Bartholomew, LA vegetation coverage as reported from 2006 type map survey.

2014 Typemap

Lake Bartholomew Type Map Survey

July 21, 2014

Prepared by: Ryan Daniel

Description

Vegetation was surveyed on July 21, 2014 by R. Daniel and C. McPherson. The entire 12.5 mile length of lake was travelled by boat while notes on observed vegetation were taken. The lake was currently near pool stage. Vegetation was documented on a map, with emphasis on coverage and location of hydrilla.

Summary

The lower portion of the lake (south of Westlakes bridge) contained insignificant coverage of emerged and floating species. Hydrilla was the most abundant SAV species, with coontail scattered along the outside edge of the hydrilla, which grew in depths to 6 ft. There was no hydrilla observed south of the southern highline crossing, though moderate amounts of coontail were found from this highline crossing to the end of the lake at the control structure. Significant amounts of emergent vegetation were found in numerous shallow locations north of the Westlakes bridge. Alligator weed and water primrose were both common, though not considered problematic. The floating species duckweed and mosquitofern were found amongst the emergent vegetation and in areas where hydrilla reached the surface, though they did not form any significant surface mats. Water hyacinth was observed in only a few locations, with total coverage minimal. There was a single patch of American lotus (< 1 ac.) on the east side of the channel, south of the northern highline crossing. Coontail was found throughout the northern portion of the lake, mostly scattered or growing on the outside edge of the hydrilla, in depths to 10 ft.

Hydrilla

Overall, hydrilla was observed from 500 m north of Barrett's boat launch to the southern highline crossing. There was near solid shoreline coverage for a 6.5 mile length of the lake, approximately from the northern highline to southern highline crossings. It was found growing to depths of 6 ft. The shallow flats in this area were all nearly completely infested. Numerous shoreline properties are severely infested. In many areas where the hydrilla reaches the surface, filamentous algae are forming surface mats over it. Total coverage is approximately 100 acres, although 60% of the lake is affected. There has not been significant expansion of affected area since 2013, though coverage appears denser and to have increased in shallow flats and points within this area.

Species List

Submersed Aquatic Vegetation
Hydrilla *Hydrilla verticillata*
Coontail C*eratophyllum demersum*

Emersed Aquatic Vegetation
Water Primrose *Ludwigia uruguayensis*
Alligator weed *Alternanthera philoxeroides*
American lotus *Nelumbo lutea*

Floating Aquatic Vegetation
Duckweed *Lemna minor*
Filamentous Algae *Pithophora sp.*
Water hyacinth *Eichhornia crassipes*
Mosquitofern *Azolla spp.*

Figure 2. Coverage of hydrilla in Bartholomew Lake, Louisiana in spring 2014.